Department of
Agriculture and Marketing

Dairy Farms
Five Year Summary

1981 - 1985

1981-1985

NOVA SCOTIA DAIRY FARM

BUSINESS SUMMARY REPORT

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FOREWORD

This report provides a summary of the business performance of Nova Scotia dairy farms over a five year period, 1981-1985 inclusive. Data used in the preparation of this summary was obtained from the Nova Scotia Dairy Farm Business Summaries prepared in each of the five years included in this report.

As noted in the Dairy Farm Business Summaries, the farms used were not selected on a random sample basis, but rather volunteered their information. Hence, care should be exercised in the interpretation and use of the results shown in this summary.

The main purpose of this summary is to provide basic information on the dairy industry, at the farm level, in Nova Scotia over a five year period. Trends in incomes, costs, net returns, efficiency and management factors are outlined.

The co-operation of the dairy producers whose business information has been used to prepare this summary is gratefully acknowledged. Thanks are also extended to Tracey Mitchell, who did the typing for this report.

The authors accept full responsibility for any errors which may appear in the final report.

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SECTION A

SUMMARY

ERRATA THE LAST SENTENCE ON PAGE 1 SHOULD READ -

"ON A PER COW BASIS, THIS EXPENSE ..."

SUMMARY

This report provides information on trends that have occured at the farm level in the Dairy Industry over the five year period, 1981-1985 inclusive. As noted earlier, the farms used to provide the basic data were not selected on a random sample basis. However, even with this noted limitation, the information contained in this summary can be used with care to provide useful trend data regarding the dairy industry in Nova Scotia.

The material is presented in the following manner - a brief summary of ratios, cost and return data, and management factors on a per farm, per cow and per hectolitre basis. The format used for presentation of information is similar to that used in the annual Dairy Farm Business Summaries.

In reviewing information contained in Table A-1, a number of observations can be made. Gross Farm Income has increased in each of the five years with an overall increase of some 25 percent over the five year period. At the same time, costs have increased 19 percent over this period. Net Farm Income has more than doubled over the five year period.

Production per cow has shown a modest increase over the five years, with the change over the period being 3.6 percent. Production has decreased slightly from 5,667 litres in 1984 to 5,640 litres in 1985. Milk sold per man equivalent has decreased by 10.5 percent over the period.

In terms of prices received from milk, this figure has also changed over the period, from an average price of $40.32 per hectolitre in 1981 to $49.83 in 1985. This represents an increase, in percentage terms, of 24 percent. While returns have been increasing, costs have been on the rise as well. The cost of producing a hectolitre of milk averaged $43.93 in 1981, while in 1985 this figure was $50.32 - for a percentage change of 15 percent. The net return to the farmer remained a negative - that is, the net cost was greater than the return. In 1985, the net return was -$.49 per hectolitre.

The largest individual component of cost in producing milk is purchased dairy ration. On a per cow basis, this return

has increased from $731. in 1981 to $760. in 1985, for a change of some 4 percent. On a per hectolitre of milk sold basis, the cost of feed increased by only $.06 from $13.42 in 1981 to $13.48 in 1985.

Investment per cow has increased gradually over the period, with the increase over the five year period being 28 percent.

Return to total invested capital improved during the five year period, going from 4.6 percent in 1981 to 8.7 percent in 1985.

Capital turnover has remained unchanged over the five year period.

TABLE A-1: SUMMARY

ITEM	1981	1982	1983	1984	1985
Gross Farm Income	170256	177915	184286	205786	213631
Total Farm Expenses	157650	163422	164257	184025	186869
Net Farm Income	12605	14493	20029	21761	26762
Labor & Management Income	841	1121	9216	9548	14002
# of Cows/Farm	65	63	61	64	64
Production/Cow (L)	5445	5518	5434	5667	5640
Cows/Man Equivalent	26	25	23	23	23
Milk Sold/Man Equiv. (HL)	1423	1391	1271	1304	1274
Receipts From Milk/HL	40.32	43.18	45.21	47.41	49.83
Cost of Producing Milk/HL	43.93	46.93	46.65	48.98	50.32
Net Return/HL	-3.61	-3.75	-1.44	-1.58	-0.49
Variable Cost as % of Total Cost	65	66	66	67	67
Fixed Cost as % of Total Cost	21	20	20	20	20
Opportunity Cost as % of Total Cost	14	14	14	13	13
Purchased Feed/Cow ($)	731	702	683	770	760
Feed Cost/HL Milk ($)	13.42	12.73	12.57	13.59	13.48
Feed Cost as % of Milk Sold (%)	35.2	29.5	27.8	28.7	27.1
Investment/Cow ($)	3836	4110	4506	4779	4920
Return on Investment (%)	4.6	5.1	7.2	7.5	8.7
Capital Turnover (Yrs)	1.5	1.5	1.5	1.5	1.5

SECTION B

PER FARM ANALYSIS :

INCOME

Total farm receipts increased from an average of $167,172. in 1981 to $210,728. in 1985, an increase of 26 percent.

Income from milk and milk subsidies accounted for 86 percent of Total Farm Receipts in 1985, up marginally from 85 percent in 1981.

TABLE B-1: INCOME

ITEM	1981	1982	1983	1984	1985
Milk Sales	134030	143299	143727	164837	173997
Milk Subsidy	7679	6912	6081	7190	6503
Livestock Sales	11905	12793	13308	14140	15266
Crop Sales	2386	2547	2966	2808	2935
Miscellaneous	11171	10948	12797	14205	12028
TOTAL FARM RECEIPTS	167172	176500	178879	203179	210728

EXPENSES

Expenses on a per farm basis increased from an average of $136,347. in 1981 to $165,476. in 1985. This represents a change of some 21 percent in Cash Expenses. Purchased dairy feed, the largest single cost item accounted for 30 percent of Cash Expenses in 1985.

TABLE B-2: EXPENSES

ITEM	1981	1982	1983	1984	1985
Dairy Feed	47161	44272	41637	49299	48840
Livestock Purchased	5981	3296	4747	4713	4858
Milk Hauling	4746	5333	5470	6127	6069
Crop Expenses	10151	7258	10946	11765	11428
Tractor & Machinery	9016	10517	9919	11351	12541
Truck & Auto	2319	2512	3541	3116	3276
Interest	12707	13452	14363	16799	17059
Labor	12098	13012	13828	16304	17648
Taxes	809	897	1051	1233	1231
Milk Marketing Costs	4742	7258	8476	10274	10049
Dairy Supplies	3270	3676	3801	4089	4187
Vet & Drugs	1493	1707	1884	2026	2136
Breeding	1599	1587	1913	2152	2432
Building & Fence Repairs	3321	3656	3849	4079	4034
Utilities	3979	4433	4529	5053	5506
Insurance	2296	2437	2566	2647	2672
Miscellaneous	10659	12506	12791	12347	11509
TOTAL CASH EXPENSES	136347	142477	145311	163372	165476

INCOME SUMMARY

In reviewing different measures of income over the five (5) year period, it can be noted that the trend of increasing income carried through to these levels as well. Net Cash Income has increased by some 47 percent over the period from $30,825. in 1981 to $45,251. in 1985. Net Farm Income has also increased from $12,606. in 1981 to $26,762. in 1985, an increase of 112 percent.

Labor and Management Income has shown significant increases over the last five years, from $841. in 1981 to the 1985 value of $14,002.

TABLE B-3: INCOME SUMMARY

ITEM	1981	1982	1983	1984	1985
Total Farm Receipts	167172	176500	178879	203179	210728
Total Cash Expenses	136347	142477	145311	163372	165476
NET CASH INCOME	30825	34023	33568	39807	45251
Plus: Inventory Change	3084	1415	5407	2606	2903
Less: Depreciation	21303	20945	18946	20653	21393
NET FARM INCOME	12606	14493	20029	21761	26762
Less: Value of Unpaid Family Labor	454	588	569	556	616
Interest on Net Worth @ 10% (11% in 1981) (12% in 1982)	11311	12784	10244	11657	12144
LABOR & MANAGEMENT INCOME	841	1121	9216	9548	14002

SECTION C

PER COW ANALYSIS

INCOME

When figures are calculated on a per cow basis, Total Farm Receipts have increased by 27 percent over the five (5) year period - from $2,590. in 1981 to $3,281. in 1985.

TABLE C-1: INCOME

ITEM	1981	1982	1983	1984	1985
Milk Sales	2077	2273	2357	2575	2709
Milk Subsidy	119	110	100	112	101
Livestock Sales	184	203	218	221	238
Crop Sales	37	40	49	44	46
Miscellaneous	173	174	210	222	187
TOTAL FARM RECEIPTS	2590	2800	2934	3173	3281

EXPENSES

Over the five (5) year period, Cash Expenses have increased from $2,113. per cow in 1981 to $2,576. in 1985 - a change of $463. per cow or some 22 percent.

TABLE C-2: EXPENSES

ITEM	1981	1982	1983	1984	1985
Dairy Feed	731	702	683	770	760
Livestock Purchased	93	52	78	74	76
Milk Hauling	74	85	90	96	94
Crop Expenses	157	189	180	184	178
Tractor & Machinery	140	167	163	177	195
Truck & Auto	36	40	58	49	51
Interest	197	213	236	262	266
Labor	187	206	227	255	275
Taxes	13	14	17	19	19
Milk Marketing Costs	73	115	139	160	156
Dairy Supplies	51	58	62	64	65
Vet & Drugs	23	27	31	32	33
Breeding	25	25	31	34	38
Building & Fence Repairs	51	58	63	64	63
Utilities	62	70	74	79	86
Insurance	36	39	42	41	42
Miscellaneous	165	198	210	193	179
TOTAL CASH EXPENSES	2113	2260	2383	2552	2576

INCOME SUMMARY

Net Cash Income on a per cow basis has increased by $228. or by 48 percent over the period. Net Farm Income has increased by $222. per cow between 1981 and 1985.

A significant increase in Labor and Management Income occured over the five (5) year period. The 1985 per cow figure shows an increase of 54 percent over the 1984 level.

TABLE C-3: INCOME SUMMARY

ITEM	1981	1982	1983	1984	1985
Total Farm Receipts	2590	2800	2934	3173	3281
Total Cash Expenses	2113	2260	2383	2552	2576
NET CASH INCOME	477	540	551	621	705
Plus: Inventory Change	48	22	89	41	45
Less: Depreciation	330	332	311	323	333
NET FARM INCOME	195	230	329	340	417
Less: Value of Unpaid Family Labor	7	9	9	9	10
Interest on Net Worth @ 10% (11% in 1981) (12% in 1982)	175	203	168	182	189
LABOR & MANAGEMENT INCOME	13	18	152	142	218

SECTION D

PER 100 LITRES ANALYSIS

INCOME

Analysis of Total Farm Receipts on a per hectolitre of milk sold basis indicates that Farm Receipts have increased by $10.60 per hectolitre over the period. This translates to a change of 22 percent.

TABLE D-1: INCOME

ITEM	1981	1982	1983	1984	1985
Milk Sales	38.14	41.19	43.37	45.43	48.03
Milk Subsidy	2.19	1.99	1.84	1.98	1.80
Livestock Sales	3.39	3.68	4.02	3.90	4.21
Crop Sales	0.68	0.73	0.90	0.77	0.81
Miscellaneous	3.18	3.15	3.88	3.91	3.32
TOTAL FARM RECEIPTS	47.57	50.74	53.99	55.99	58.17

EXPENSES

Cash Expenses increased by $6.88 on a per hectolitre of milk sold basis over the five (5) year period. In percentage terms, this represents a change of 18 percent.

TABLE D-2: EXPENSES

ITEM	1981	1982	1983	1984	1985
Dairy Feed	13.42	12.73	12.57	13.59	13.48
Livestock Purchased	1.70	0.95	1.43	1.30	1.34
Milk Hauling	1.35	1.53	1.65	1.69	1.68
Crop Expenses	2.89	3.43	3.30	3.24	3.15
Tractor & Machinery	2.57	3.02	2.99	3.13	3.46
Truck & Auto	0.66	0.72	1.07	0.86	0.90
Interest	3.62	3.87	4.33	4.63	4.71
Labor	3.44	3.74	4.17	4.49	4.87
Taxes	0.23	0.26	0.32	0.34	0.34
Milk Marketing Costs	1.35	2.09	2.56	2.83	2.77
Dairy Supplies	0.93	1.06	1.15	1.13	1.16
Vet & Drugs	0.42	0.49	0.57	0.56	0.59
Breeding	0.46	0.46	0.58	0.59	0.67
Building & Fence Repairs	0.94	1.05	1.16	1.12	1.11
Utilities	1.13	1.27	1.37	1.39	1.52
Insurance	0.65	0.70	0.77	0.73	0.74
Miscellaneous	3.03	3.60	3.86	3.40	3.18
TOTAL CASH EXPENSES	38.80	40.96	43.86	45.02	45.68

INCOME SUMMARY

An analysis of income on a per hectolitre of milk sold basis reveals Net Cash Income increased by $3.72 over the five (5) year period. Net Farm Income shows an increase of $7.52 per hectolitre over the five (5) year period.

Labor and Management Income shows a significant increase of $3.63 per hectolitre over the period.

TABLE D-3: INCOME SUMMARY

ITEM	1981	1982	1983	1984	1985
Total Farm Receipts	47.57	50.74	53.99	55.99	58.17
Total Cash Expenses	38.80	40.96	43.86	45.02	45.18
NET CASH INCOME	8.77	9.78	10.13	10.97	12.49
Plus: Inventory Change	0.88	0.41	1.63	0.72	0.80
Less: Depreciation	6.06	6.02	5.72	5.69	5.91
NET FARM INCOME	3.59	4.17	6.05	6.00	7.39
Less: Value of Unpaid Family Labor	0.13	0.17	0.17	0.15	0.17
Interest on Net Worth @ 10% (11% in 1981) (12% in 1982)	3.22	3.68	3.09	3.21	3.35
LABOR & MANAGEMNT INCOME	0.24	0.32	2.79	2.64	3.87